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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,384	09/17/2003	Robert J. Robinson	OLI-43	4206

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EXAMINER

BODDIE, WILLIAM

ART UNIT

PAPER NUMBER

2629

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/665,384	Applicant(s) ROBINSON, ROBERT J.	
	Examiner William Boddie	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In an amendment dated, March 7th, 2006, the Applicant amended independent claims 1, 9 and 15, and dependent claims 2-7. Currently claims 1-23 are pending.

Response to Arguments

2. Examiner agrees that the Applicant has sufficiently amended claims 2-7 to overcome the previous 35 U.S.C. 112 rejection of claims 2-7. As such, the previous 35 U.S.C. 112 rejection is withdrawn.

3. Applicant's arguments with respect to the 35 U.S.C. 103 rejection of claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4, 6-8, 15-19, 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolfson et al. (US 6,970,109) in view of Ha et al. (US 6,530,838) and further in view of Glover (US 2003/0157961).

With respect to claim 1, Wolfson discloses, a multi-component electronic device (fig. 1) which comprises:

a) a display component (12 in fig. 1), comprising a housing having an exterior surface (note exterior surface of 12 in fig. 1); a microprocessor within the housing (12 is disclosed as a PDA which inherently includes a microprocessor); a data memory within

the housing (col. 4, lines 44-46), a data display on the external surface of the housing (display in 12 of fig. 1) and a first electrical connector (communication port; col. 2, lines 41-42).

b) an input component (fig. 2), comprising a cartridge having an outer surface (all outer housings of input device in fig. 1, 20,2,34,36,...), a data input element (keys in fig. 5) on the outer surface of the cartridge; and a communications interface within the cartridge (44 and 26 in fig. 1); wherein the cartridge comprises a second electrical connector (44 in fig. 1) and which input component is matedly and removably attachable to the display component via a first electrical connector (col. 4, lines 57-58) such that when the first electrical connector is attached to the second electrical connector (fig. 3), the outer surface of the input component is juxtaposed to the exterior surface of the display component (note from fig. 3, that the PDA bottom surface is flush/juxtaposed with the connector surface of the keypad; this juxtaposition is seen as equivalent to Applicant's invention seen in fig. 1), the data input element are electrically connected to a microprocessor (col. 3, lines 64-67-col. 4, line 1).

Wolfson does not expressly disclose that the data memory and display are electrically coupled to the microprocessor; that the electrical connector is coupled to, the data memory and the data display.

Ha discloses, a multi-component electronic device (fig. 1), comprising, a display component (30 in fig. 5) that comprises, data memory (360 in fig. 5), a data display (330 in fig. 5); all of which are coupled to the microprocessor (320 in fig. 5) and the electrical connector (340 in fig. 5).

At the time of the invention it would have been obvious to one of ordinary skill in the art to couple together the data devices located in the PDA of Wolfson as taught by Ha.

The motivation for doing so would have been to increase the functionality of the device by allowing the microprocessor to be centrally connected to all the devices.

Neither Wolfson nor Ha expressly disclose, that the data input element is capable of transmitting data to a telecommunications network.

Glover discloses, a multi-component electronic device (16 in fig. 2), comprising an input component comprising, a wireless modem (14 in fig. 3), capable of transmitting data between a telecommunications network and a microprocessor (page 2, para. 19 also see para. 21).

Wolfson, Glover and Ha are all analogous art because they are all from the same field of endeavor namely, multi-component electronic devices comprising removable keypad input means.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the wireless modem, taught by Glover, in the input device, taught by Wolfson and Ha.

The motivation for doing so would have been to reduce the components and bulk associated with wireless data access (Glover; para. 6).

Therefore it would have been obvious to combine Wolfson with Ha and Glover for the benefit of additional functionality and reduced bulk in wireless access to obtain the invention as specified in claim 1.

With respect to claim 15, claim 15, section I is merely a recitation of the limitations of claim 1. As such section I is rejected on the same grounds shown above in claim 1.

With respect to section II-IV, Wolfson discloses, inputting data and function commands into the microprocessor of the display component via the data input element of the removable input component and subsequently processing and displaying entered data (throughout the specification Wolfson refers to data entry and commands being input to the PDA via the keyboard and processed and displayed, specifically note col. 6, lines 14-49 and figs. 6-10).

With respect to claims 2 and 17, Wolfson, Glover and Ha disclose the multi-component electronic device of claims 1 and 15 (see above).

Wolfson further discloses, wherein the first connector comprises a data port (col. 3, line 67 states that the connector provides data communication between the two connectors).

With respect to claims 3 and 18, Wolfson, Glover and Ha disclose the multi-component electronic device of claims 1 and 15 (see above).

Wolfson further discloses, wherein the second connector comprises a data port (col. 3, line 67 states that the connector provides data communication between the two connectors).

With respect to claims 4 and 19, Wolfson, Glover and Ha disclose the multi-component electronic device of claims 1 and 15 (see above).

Wolfson further discloses, wherein the data input element comprises a keypad (fig. 5).

With respect to claims 6 and 21, Wolfson, Glover and Ha disclose the multi-component electronic device of claims 1 and 15 (see above).

Wolfson does not expressly disclose that the display is a liquid crystal display.

Ha further discloses, wherein the data display comprises a liquid crystal display (col. 4, line 15).

At the time of the invention it would have been obvious to one of ordinary skill to use a liquid crystal display, as taught by Ha, in the device of Wolfson. The benefit of doing so being the portability of the display.

With respect to claims 7 and 22, Wolfson, Glover and Ha disclose the multi-component electronic device of claims 1 and 15 (see above).

Wolfson further discloses, the electronic device comprises a hand held electronic data organizer (PDA in fig. 1).

With respect to claims 8 and 23, Wolfson, Glover and Ha disclose the multi-component electronic device of claims 1 and 15 (see above).

Glover further discloses, wherein the communications interface comprises a modem (14 in fig. 3 is clearly a modem).

With respect to claim 16, Wolfson, Glover and Ha disclose the method of claim 15 (see above).

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Glover further discloses, transmitting data between the microprocessor and a telecommunications network via the communications interface (page 2, para. 19 also see para. 21).

6. Claims 5 and 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Wolfson et al. (US 6,970,109) in view of Ha et al. (US 6,530,838) and further in view of Glover (US 2003/0157961) and further in view of Glad (US 6,498,720).

With respect to claims 5 and 20, Wolfson, Ha and Glover disclose the multi-component electronic device of claims 1 and 15 (see above).

Neither Wolfson, Ha nor Glover discloses the data input element comprises a touch screen.

Glad discloses a multi-component electronic device comprising a PDA and a touch screen keyboard (14 in fig. 1; col. 1, lines 15-21).

Wolfson, Glover, Ha and Glad are analogous art because they are all multi-component devices combining PDAs and input means.

At the time of the invention it would have been obvious to replace the input keys of Wolfson/Glover/Ha with the touch screen of Glad. The benefit being the increased functionality and greater ease of use.

7. Claims 9-12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolfson et al. (US 6,970,109) in view of Glover (US 2003/0157961).

With respect to claim 9, Wolfson discloses, a data input device comprising a cartridge having an outer surface (all outer housings of input device in fig. 1, 20,2,34,36,...), a data input element (keys in fig. 5) on the outer surface of the cartridge;

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and a communications interface within the cartridge (44 and 26 in fig. 1); wherein the cartridge comprises a second electrical connector (44 in fig. 1) and which input component is matedly and removably attachable to a first electrical connector (col. 4, lines 57-58) of a hand held electronic data organizer (PDA in fig. 1) such that when the data input device is attached to the hand held electronic data organizer (fig. 3), the outer surface of the input component is juxtaposed to the exterior surface of the display component (note from fig. 3, that the PDA bottom surface is flush/juxtaposed with the connector surface of the keypad; this juxtaposition is seen as equivalent to Applicant's invention seen in fig. 1), the data input element are electrically connected to a microprocessor (col. 3, lines 64-67-col. 4, line 1).

Wolfson does not expressly disclose that the data input element is capable of transmitting data between a telecommunications network and a microprocessor.

Glover discloses, a multi-component electronic device (16 in fig. 2), comprising an input component comprising, a wireless modem (14 in fig. 3), capable of transmitting data between a telecommunications network and a microprocessor (page 2, para. 19 also see para. 21).

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the wireless modem, taught by Glover, in the input device, taught by Wolfson.

The motivation for doing so would have been to reduce the components and bulk associated with wireless data access (Glover; para. 6).

Therefore it would have been obvious to combine Wolfson with Glover for the benefit of reduced bulk in wireless access to obtain the invention as specified in claim 9.

With respect to claim 10, Wolfson and Glover disclose the multi-component electronic device of claim 9 (see above).

Wolfson further discloses, wherein the first connector comprises a data port (col. 3, line 67 states that the connector provides data communication between the connectors).

With respect to claim 11, Wolfson and Glover disclose the multi-component electronic device of claim 9 (see above).

Wolfson further discloses, wherein the second connector comprises a data port (col. 3, line 67 states that the connector provides data communication between the connectors).

With respect to claim 12, Wolfson and Glover disclose the multi-component electronic device of claim 9(see above).

Wolfson further discloses, wherein the data input element comprises a keypad (fig. 5).

With respect to claim 14, Wolfson and Glover disclose the multi-component electronic device of claim 9 (see above).

Glover further discloses, wherein the communications interface comprises a modem (14 in fig. 3 is clearly a modem).

8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wolfson et al. (US 6,970,109) in view of Glover (US 2003/0157961) and further in view of Glad (US 6,498,720).

With respect to claim 13, Wolfson and Glover disclose the multi-component electronic device of claim 9 (see above).

Neither Wolfson nor Glover discloses the data input element comprises a touch screen.

Glad discloses a multi-component electronic device comprising a PDA and a touch screen keyboard (14 in fig. 1; col. 1, lines 15-21).

Wolfson, Glover and Glad are analogous art because they are all multi-component devices combining PDAs and input means.

At the time of the invention it would have been obvious to replace the input keys of Wolfson/Glover with the touch screen of Glad. The benefit being the increased functionality and greater ease of use.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Singh (US 2002/0186525) discloses a cartridge device connectable to a PDA. Takahashi (US 6,147,858) discloses a keypad attachment for a PDA. Solomon (US 2003/0006968) discloses a keypad attachment for a PDA.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Please note that the Examiner's art unit has been changed since the last Office Action from 2674 to 2629.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Boddie whose telephone number is (571) 272-0666. The examiner can normally be reached on Monday through Friday, 7:30 - 4:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wlb
3/23/06

AMR A. AWAD
PRIMARY EXAMINER
